

# CHELMSFORD AMATEUR RADIO SOCIETY

NEWSLETTER No.243

May 1986

## NEXT MEETING - PRACTICAL HINTS AND TIPS

On Tuesday 6th May, volunteer members of the society will give us the benefit of their experiences in the practical aspects of Amateur Radio. A series of mini-lectures will include topics such as Power Measurement, PCB layout and the application of Batteries. In addition there will be a description of a new 'My Rig'. We look forward to seeing you at 7.30pm at the Marconi College, Arbour Lane Chelmsford.

## CONSTRUCTORS' COMPETITION

A final reminder to put the finishing touches to that homebrew project that you've been working on over the winter months, the annual Constructors' Competition is approaching, are you ready?

## DATES FOR YOUR DIARY

6 May	- Practical Hints and Tips.
18 May	- DF Colchester/Chelmsford.
3 June	- Constructors' Competition.
7/8 June	- HF National Field Day.
1 July	- Electricity Generation and Distribution.
12 July	- Special Event Station, North Springfield.

## MEMBERS NEWS

Congratulations to Andrew, G4KQE and Daphne, G8WQZ on the birth of a son, Peter, William on 24th March, a prospective new member?

The Society extends a welcome to a new member, Robert Mordue G1SDN.

Congratulations to Phil (ex G6PBG) on his new call G0ELM.

Dave G8UUD, who has recently moved to Chelmsford would appreciate some assistance to erect a 16 foot mast on the side of his house, in particular from someone with access to a hammer drill and the know-how to fix two 24 inch stand-off brackets to the brick wall. Any one who can help please contact Dave on Chelmsford 26565.

## LAST MONTHS MEETING - URBAN TRAFFIC CONTROL - Brian G0BDS.

Last months meeting was a lecture about a subject close to all members hearts - getting through Chelmsford traffic signals without stopping.

The lecture, given by Mr.Brian Edwards, Section Engineer for special projects, Essex County Council Highways, gave us a full and detailed description into the methods and criteria involved in the operation of the Urban Traffic Control Computer. This computer (a Plessey one, not GEC/Marconi) sets the patterns of signals and thus traffic movement throughout Chelmsford town, Braintree, Southend, Rayleigh and soon, Basildon.

Brian told us how the original concept of a UTC was tested by hiring police officers and getting them to pretend to be traffic signals, then by co-ordinating them all in an area the basis of what would be expected for traffic flow was obtained.

In reality, Induction loops are cut into the road surfaces and by careful tuning can give the speed and size of vehicles, this data is then relayed by Outstation Terminal Units, Multiplexers and rented landlines back to the UTC in Chelmsford.

He explained that "EVERY" driver knows how to cure all the problems of traffic congestion in Chelmsford and that was proved during the many critical, but friendly questions and comments that were thrust at him (it's a very emotive subject - traffic signals). However, you can't please all of the people all of the time, and you can't put a quart in a pint pot.

Buzz words began to emerge as in most computer practical exercises, SCOOT, Split Cycle Offset Optimization Technique, was the main one used. This allows the system to time cycle the traffic signals to a preset overall plan based on probability factors for traffic flow at set times. This can be automatically updated as flow rates are received from the SCOOT induction loops. Fire engines and ambulances can call up a GREEN WAVE by pushing a button at their control station. Giving them green light precedent on the routes they most use when answering 999 calls.

Brian skilfully answered many questions and I am sure will, by the time you read this Newsletter, have reprogrammed the computer to allow us all to cross Arbour Lane traffic lights without stopping after the next club meeting, hi".

## GETTING TO KNOW YOU

We suggest that the wearing of callsign badges at club meetings could help to put the face to the voice heard on the air or even who is sitting next to you. This idea was proposed at the last committee meeting when reviewing the impressive list of members printed in the last newsletter and questioning who is G3!!! and G8\*\*\* ?

### INTERFERENCE - Brian G3CVI

Be warned.... great changes in the official attitude to our hobby could be just round the corner.... unless we are prepared to pressurize our representative body to approach the authorities in a very determined manner.

If you are a member of the R.S.G.B. I suggest you read very very carefully the items dealing with the policy changes on the part of the R.I.S. of the D.T.I.

You know and I know, that the ordinary piece of domestic electronic equipment is not built in screened cases and rarely has any screening at all other than coilcans, even these are frequently absent. The result is that our legal and clean fundamental signals find their way into the said equipments directly and need not have been picked up via antennas or down leads or speaker leads. Secondly the local oscillators of receivers in domestic equipment have very little or no filtering and any one of the harmonics of these oscillators can mix with our signals producing unwanted outputs at R.F., I.F. and A.F. This is not OUR fault and one is prompted to enquire what would happen to those unfortunate people who happen to live within the high signal fields of broadcast transmitters, radar establishments, research and experimental premises, police and other essential services etc. One could also ask why should we be called upon to suffer the crippling interference received from T.V. time-base radiation, from computers which are not screened or filtered, from cracked insulators on the overhead electricity supply, from unsuppressed thermostats.... the list is endless.

I invite discussion on the above and would suggest we have an evening given to such at some future Tuesday meeting. Comments please.

### DF NEWS - Dick G3WHR.

The May issue of Radcom will have details for the Chelmsford/Colchester National Qualifying Event; OS Map 168, starting from Layer Breton Heath, NGR 944188, at 1.20pm. There are some changes to the rules this year, mostly concerning approximate bearings, and one which states, 'The transmitter operator, or his assistant must, if challenged by a competitor holding a DF receiver, admit that his is one of the hidden stations'. There's a good tale behind that one! This year we also have an Umpire. If you would like to book a tea for 18 May, please contact me.

The first Chelmsford event took place on Friday 18 April when Paul Clark hid G0BTH/P in a wood near Rivenhall. The 12 teams were soon on-site but found their close-in bearings very confusing. Paul had put up several dummy aerials to mislead those who like following aerials. It rapidly became a night event with a good torch being necessary. Congratulations to Andrew, who showed us all how it should be done.

### RESULTS.

1	Andrew Mead	8-35
2	Ian Butson	8-35-46
3	Roy Emeny	8-35-50
4	Peter LARBALESTIER	8-37
5	Jeff Herbert	8-39
6	Frank Pearson	8-43
7	Pete Bishop	8-46
8	Pat Cranmer	8-48
9	Mike Hawkins	8-48-30
10	Alan Williams	8-49
11	Dick Brocks	8-50
12	Mick Farmer	8-52

### THIS MONTHS EVENTS.

2 May	Colchester
9 May	Chelmsford
18 May	RSGB Qualifying Event Chelmsford/Colchester
30 May	Colchester

### CLUB NETS

The two club nets, organised for members, are still active on the Tuesday evenings between meetings. The 2 metre FM net is on 145.275MHz at 19.15 BST and the 10 metre CW net is on 28.050MHz at 20.30 BST (until Field Day)

### COMMITTEE MEETING

The May Committee Meeting will be held in the Marconi College Residence at 7:30pm on Wednesday, 14th May. You are most welcome to join us for the meeting or just to have a quiet rag-chew afterwards over a drink.

73 from Roy & Ela, G3PMX & G6HKM  
Telephone, Home (0245) 360545  
or Office (0245) 353221 Ex.3815

1, High Houses,  
Mashbury Road,  
Great Waltham,  
CM3 1EL.